IN THE CLAIMS:

The pending claims are listed in the attached:

Appendix A1: Pending claims (Clean Version of Replacement Claims).

☒ Changes in the pending claims relative to the last version of record are reflected in:

Appendix A2: Changes to claims (redline)(Version With Markings to Show Changes Made).

Please enter any new claims or changes reflected in Appendices A1 and A2.

REMARKS

Reconsideration of the rejections is respectfully requested.

The status of the claims is as follows:

Amended:	8
Cancelled:	None
New:	None
Pending:	1, 3-13
Allowed:	1, 3-7, 13

Support for the change to claim 8 should be apparent from the specification, and the discussion below. No new matter is added by the amendment.

The Applicants respectfully submit that the Amendment meets the requirements of 37 CFR 1.116 since it places the claims in condition for allowance or in better condition for consideration on appeal. Accordingly, Applicants respectfully request entry of the Amendment.

The Office's designation of claims 1-7 and 13 as allowable is gratefully acknowledged.

The Office maintains a rejection of claim 8-12, noting that prior submissions did not "provide data supporting how stable the composition is over the equivalent composition with excipients." Applicant respectfully notes that the specification provides such data for the dosage forms claimed, with the result so clear that the comparison composition is not needed. For example, Example 2 shows how polymers are selected to provide less than 5% active ingredient loss after stressed incubation of the dosage form for four weeks at 40° C and 75% relative

humidity. Example 4 shows how the claimed dosage form can have stability under stressed incubation at 40° C and 75% relative humidity for twenty six weeks, basically a half a year. The dosage form of this example was sufficiently stable under reasonable storage conditions to avoid losses in excess of 2% after twenty six weeks, and keep loses to about 5% at 40° C and 75% relative humidity. The art, such as Gupta et al., "Effect of Excipients on the Stability of Levothyroxine Sodium Tablets," J. of Clinical Pharm. Ther., 15: 331-336, 1990 and U.S. Patent Nos. 5,225,204, 5,635,209, 5,955,105, 6,190,696; 6,399,101 and 6,491,946 (attached), repeatedly mentions the instability of most thyroid hormone compositions, such that applicant respectfully submits that the claimed composition is unexpectedly stable.

In light of these amendments and remarks, it is respectfully submitted that the Amendment should be entered, the rejections should be withdrawn, and that the application is in condition for allowance.[2]

Respectfully submitted,

Arthur E. Jackson
Registration No. 34,354

Dechert LLP
A Pennsylvania Limited Liability Partnership
Princeton Pike Corporate Center
PO Box 5218
Princeton, New Jersey 08543-5218
Allen Bloom (609) 620-3214
Arthur E. Jackson (609) 620-3254
Fax: (609) 620-3259
Attention: Arthur E. Jackson

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[2] **Fee Deficiency**

If any additional extension is required, please consider this paper a petition for such an extension; Any fee for the extension required for consideration of this paper but not enumerated above or in a transmittal or other associated paper can be charged to Account No. 04-0480.

AND/OR

If any additional fee is required for consideration of this paper, please charge Account No. 04-0480.

APPENDIX A1: PENDING CLAIMS (CLEAN VERSION OF REPLACEMENT CLAIMS)

1. **(Unchanged, Previously Once Amended)** A method of formulating a solid dosage of thyroid hormone, while avoiding instability caused by interaction of the active ingredient with excipients, comprising electrostatically depositing the active ingredient, as a dry powder substantially free of excipients, onto a pharmaceutically acceptable polymer substrate.

3. **(Unchanged)** The method of claim 1, wherein the thyroid hormone is levothyroxine sodium or triiodothyronine.

4. **(Unchanged)** The method of claim 1, wherein the polymer has received regulatory approval and is of GRAS status.

5. **(Unchanged)** The method of claim 4, wherein the polymer is selected from the group consisting of polyvinyl alcohol, polyvinyl pyrrolidinone, polysaccharide polymers, acrylate polymers, methacrylate polymers, phthalate polymers, polyvinyl acetate, methyl cellulose, carboxymethylcellulose, hydroxyethylcellulose, hydroxypropylcellulose, hydroxypropylmethylcellulose, ethyl cellulose, Eudragits, starch-based polymers, gelatin, and combinations thereof.

6. **(Unchanged)** The method of claim 4, wherein the polymer is substantially unreactive with an amino group or iodo group in the thyroid hormone molecule.

APPENDIX A1: PENDING CLAIMS (CLEAN COPY) – (continued)

7. **(Unchanged)** The method of claim 6, wherein the polymer is selected from the group consisting of hydroxypropylcellulose, hydroxypropylmethylcellulose, ethyl cellulose and combinations thereof.

8. **(Amended)** An improved solid pharmaceutical dosage formulation, comprising a therapeutic amount of thyroid hormone, electrostatically deposited on a pharmaceutically acceptable polymer substrate as a dry powder substantially free of excipients, wherein the average powder particle size is less than about 15μ, wherein the polymer substrate is selected to provide less than 5% active ingredient loss after incubation of the dosage form for four weeks at 40° C and 75% relative humidity.

9. **(Unchanged)** The formulation of claim 8, wherein the thyroid hormone is levothyroxine sodium or triiodothyronine.

10. **(Unchanged)** The formulation of claim 8, wherein the average powder particle size is less than about 10μ.

11. **(Unchanged)** The formulation of claim 8, wherein the average powder particle size is less than about 5μ.

12. **(Unchanged)** The formulation of claim 8, wherein the polymer is substantially unreactive with an amino group or iodo group in the thyroid hormone molecule.

APPENDIX A1: PENDING CLAIMS (CLEAN COPY) – (continued)

13. **(Unchanged, Previously Once Amended)** The method of claim 1, further comprising:

(a) applying a cover film to encapsulate the electrostatically deposited active ingredient, so as to form a stable core; and

(b) further processing the stable core into a dosage form resembling a tablet, capsule, caplet, wafer or stamp-like presentation.

APPENDIX A2: CHANGES TO CLAIMS (REDLINE): VERSION WITH MARKINGS TO SHOW CHANGES MADE:

8. **(Amended)** An improved solid pharmaceutical dosage formulation, comprising a therapeutic amount of thyroid hormone, electrostatically deposited on a pharmaceutically acceptable polymer substrate as a dry powder substantially free of excipients, wherein the average powder particle size is less than about $15\mu_a$ wherein the polymer substrate is selected to provide less than 5% active ingredient loss after incubation of the dosage form for four weeks at 40° C and 75% relative humidity.